

Remarks

Claims 1-39 are pending.

Objections to the Specification

1. Objection to the Abstract. The Examiner objects to the abstract "because it appears to be reciting a portion of claim language and does not follow the prescribed format", citing MPEP § 608.01(b). Applicant respectfully declines the Examiner's invitation to amend the Abstract. So far as Applicant is aware, the applicable rule (37 C.F.R. 1.72) does not prohibit using language from a claim in the Abstract. The Guidelines in MPEP § 608.01(b) also do not prohibit using language from a claim in the Abstract, except that formal language such as "means" and "said" **should** be avoided. Hence, there is no prohibition even of these formal claim terms. In any event, the Abstract does not use such formal claim language.

Applicant notes also that the current state of the law for interpreting patent claims, as set forth in reported decisions from the Federal Circuit Court of Appeals, makes it clear that each and every part of the Specification, including the Abstract, may be used to limit/narrow the scope of the claims. The patent writer, therefore, paraphrases claim language in the Abstract at his/her peril -- he/she is placed at even greater peril when amending the Abstract due to the added specter of risking a narrowing estoppel.

If the Examiner has an objection to specific language in the Abstract, and can support that objection with a specific reference to a specific rule that prohibits the purportedly objectionable language, she is respectfully requested to specify such language and such rule. Absent such a showing, Applicant respectfully requests that the Examiner withdraw her objection to the Abstract.

2. Objection to the Title. The Examiner states without explanation that the title "is not descriptive." She purports to "require" a new title "that is clearly indicative of the invention to which the claims are correct." For the reasons noted below, the Applicant respectfully declines the Examiner's invitation to change the title.

"Adjusting the colors in a display or printed image is often referred to as color calibration." Specification paragraph 0002. Claims 1-16 are directed to a color calibration method. Claims 17-32 are directed to a computer readable medium having

instructions thereon for performing the color calibration recited in Claims 1-16. The computer readable medium of Claims 32-33 stores programming for making perceptually uniform adjustments to the color image corresponding to the adjustment controls. The printer of Claims 35-37 and the printing system of Claim 38 includes a memory storing programming for making perceptually uniform adjustments to the color image corresponding to the adjustment controls. Claim 39 is directed to a color calibration system.

All of the claims relate to color calibration. Therefore, it appears to Applicant that the title "Color Calibration" accurately and concisely reflects the claimed subject matter. If the Examiner disagrees, she is respectfully requested to explain the perceived deficiencies in this title. It would be particularly helpful in this regard if the Examiner would suggest a title she feels more accurately reflects the claimed subject matter, being careful, of course, not to suggest a title that limits the scope of the claimed subject matter.

3. Reference to Color Figures. The reference to the use of color figures in paragraph 0032 in the Specification has been deleted.

Objection to Claim 36

A period has been added to the end of Claim 36.

Claim Rejections Under Section 101

Claims 17-34 were rejected under Section 101 as being directed to non-statutory subject matter. The Examiner correctly notes that the definition of a computer readable medium in the Specification includes electromagnetic media. The Examiner also notes that an "electromagnetic carrier signal is considered non-statutory." Office Action page 2, paragraph 6. Even if this is true, electromagnetic media is not limited to carrier signals. The pertinent passage in the Specification reads as follows:

The computer readable medium can comprise any one of many physical media such as, for example, electronic, magnetic, optical, electromagnetic, infrared, or semiconductor media. More specific examples of a suitable computer-readable medium would include, but are not limited to, a portable magnetic computer diskette such as floppy diskettes or hard drives, a random access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory, or a portable compact disc. Specification paragraph 0051.

No mention is made of signals in the definition of a computer readable medium. While it may be true that a carrier signal is an electromagnetic medium, electromagnetic media is not limited to carrier signals. There are, in fact, many types of statutory electromagnetic media. For example, RAM is typically an electronic media, which is one form of electromagnetic media. For another example, a portable compact disc is often an optical media, which is another form of electromagnetic media. Hence, the reference to electromagnetic media as one suitable type of computer readable media does not render Claims 17-34 non-statutory. The Examiner's assertion might have merit if Claims 17-34 were limited to a carrier signal. They are not. The rejections under Section 101 should be withdrawn.

Distinguishing Whiting

Claims 1-14, 17-30 and 33-39 were rejected under Section 102 as being anticipated by Whiting 6618170. Claims 15-16 and 31-32 were rejected under Section 103 as being obvious over Whiting in view of Falk 2004011992.

1. Perceptually Uniform Adjustments (Claims 1-14, 17-30 and 33-39). The rejections of Claims 1-14, 17-30 and 33-39 are all based on the assertion that Whiting teaches making a perceptually uniform color adjustment. As detailed below, this assertion is not correct.

Claim 1 recites making a perceptually uniform adjustment to the first color in the image. Each of the other independent claims, Claims 5, 9, 12, 13, 17, 21, 25, 28 and 29, recite a similar limitation. "Perceptually uniform", which is specially defined in the Specification, means that the perceived change in a color is directly proportional to the increment of change selected. The Specification reads in pertinent part:

As used in this document, "perceptually uniform" means that the perceived change in a color is directly proportional to the increment of change selected to adjust the color. Hence, the change from the original color image printed or displayed in step 74 to the adjusted color image printed or displayed in step 80 will be perceived in the same proportion as the adjustment selected in step 78. For example, if the user selects an adjustment to make the green apples in the fruit image of Fig. 7 more green by an increment of four, then the apples in the adjusted color image will appear more green by a factor of two over an increment of two and more green by a factor of four over an increment of one.

Whiting does not teach that the perceived change in a color is directly proportional to the increment of change. The term "perceptually uniform" does not appear in Whiting. Whiting also does not mention proportionality between an increment of color change selected by a user and the perceived change in color. Rather, Whiting teaches presenting the effects of a user-selected color change in all of the colors in an image. The pertinent passages from Whiting are quoted below.

In accordance with a further aspect of the present invention, the dynamic image representation includes a skin tone portion displayed in an environment substantially including the rest of the color spectrum. The consequence of hue shift commands can thus be perceived by the user not only with reference to the skin tone of the image representation but in the effects on other portions of the image representation. Whiting column 3, lines 10-17.

* * *

More importantly, though, a dynamic image representation 76 is also included within the display 22 comprising an actual picture preferably illustrating a skin-tone color as well as a spectrum of other colors. The effect of the picture representation 76 is that the adjustment communicated by the operator can now more accurately represent the effect of hue shifts in the overall picture and can be communicated and perceived in combination with relative movements between color bars 32 and 52. A huge shift is affected by an operator touching the touch pads 82, 84, so that the slide bar 52 can move to one of the five positions relative to spectrum are 32 as noted above. With reference to FIGS. 3C and 3D, if the operator moves the slide bar 52 from the default or neutral position as shown in FIG. 3C, to the "+1" position shown in FIG. 3D, *the effect of the hue shift is that the reds will become more yellow, the yellows will become more green, the greens will become more blue, the blues will become more purple, the purples will become more magenta and magentas will become more red.* Whiting column 4, line 58 through column 5, line 9 (emphasis added).

Conspicuously absent from the highlighted text at the end of this quote is any mention of a specific relationship in which the incremental change selected by the operator (+1) is rendered proportionally in the display. On the contrary, the highlighted text teaches only a general relationship between the incremental change selected by the operator (+1) and the display -- the reds become more yellow, the yellows become more green, the greens become more blue, the blues become more purple, the purples become more magenta, and the magentas become more red. While it might be possible to implement the color calibration scheme taught by Whiting using perceptually uniform adjustments, other techniques might also be used to implement Whiting's

scheme. The plain fact is that Whiting does not teach or even suggest the use of perceptually uniform adjustments to implement his scheme. Hence, Whiting does not support the Section 102 rejections.

If the Examiner disagrees, she is respectfully requested to point out and specifically explain those passages in Whiting that might somehow reasonably be interpreted as teaching the use of "perceptually uniform" color adjustments as that term is specially defined in the Specification. Absent such a showing, the rejections of Claims 1-14, 17-30 and 33-39 should be withdrawn.

2. Using Memory Colors (Claims 5-16 and 21-33).

Claim 5 recites displaying a palette of memory colors appearing in an image, displaying a menu of memory color adjustments, and, in response to a user selecting an adjustment from the menu, making a perceptually uniform adjustment to a memory color in the image. Claims 5, 12, 21 and 28 and 33 recites similar limitations.

Whiting teaches a color bar 32 with magenta 34 and 46, red 36 and 48, yellow 38, green 40, blue 42 and purple 44, and a slide bar 52 for selecting adjustments to the colors on color bar 32. Whiting column 4, lines 28-32 and column 4, line 66 through column 5, line 2. Whiting does not mention memory colors except to the extent his reference to skin tone color might be deemed a reference to a memory color. Skin tone, however, is not a color displayed on color bar 32. Whiting, therefore, does not teach displaying a palette of memory colors appearing in the image.

While some of the colors included on Whiting's color bar 32 might be considered memory colors, color bar 32 is still not a palette "of" memory colors. Rather, it is a palette of magenta, red, yellow, green, blue, and purple. The distinction between a "palette of memory colors" and a palette of colors that might coincidentally include a memory color is made more clear by considering the other elements of Claim 5. Claim 5 recites displaying a menu of memory color adjustments. Whiting, of course, does not teach any such menu because his color palette (color bar 32) is not a palette of memory colors. Consequently, his adjustment menu (slide bar 52) displays the same colors found on color bar 32, rather than a menu of memory color adjustments. Furthermore, Whiting also does not teach adjusting a memory color in the image in response to a user selecting a memory color adjustment because (1) there is no teaching that Whiting's image includes a memory color and (2) there is no mechanism in Whiting for

adjusting a memory color that might happen to appear in the image from the magenta, red, yellow, green, blue, and purple color bar 32.

The fact that it is possible that Whiting's image includes a memory color, possible that his color bar 32 includes the same memory color, and possible that his slight bar 52 includes an adjustment for this same color, is not sufficient to support the Section 102 rejections. It is well settled that the mere fact that a certain thing may result from a given set of circumstances is insufficient to support a Section 102 rejection. See e.g., MPEP § 2112, paragraph IV.

For this additional reason, therefore, Claims 5, 12, 21, 28 and 33 distinguish patentably over Whiting as do their respective dependent claims.

The subject matter of Claim 9 also uses memory colors. Claim 9 recites: prompting a user to select a memory color appearing in an image; prompting the user to select an adjustment to the selected memory color; in response to a user selecting an adjustment to the selected memory color, making a perceptually uniform adjustment to the selected memory color; and rendering an adjusted color image reflecting the adjustment made to the selected first memory color. Claims 13, 15, 25, 29, 31 recites similar limitations.

As detailed above with regard to Claim 5, Whiting does not teach a memory color palette or a memory color adjustment menu. Whiting, therefore, does not and cannot teach the prompts recited in Claim 9.

For this additional reason, therefore, Claims 9, 13, 15, 25, 29, and 31 distinguish patentably over Whiting as do their respective dependent claims. (This distinguishing feature is not an "additional" distinguishing feature for Claims 15 and 60.)

All pending claims are now in condition for allowance.

The foregoing is believed to be a complete response to the pending Office Action.

Respectfully submitted,

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